

**WHAT IS CLAIMED IS:**

- 1        1. A method of maintaining printed circuit board manufacturing equipment  
2 comprising contacting a component of the equipment with a composition including an  
3 oxidant.
- 1        2. The method of claim 1, wherein the composition is an aqueous solution.
- 1        3. The method of claim 1, wherein the oxidant includes a peroxide.
- 1        4. The method of claim 1, wherein the composition further comprises a pH  
2 modifier.
- 1        5. The method of claim 4, wherein the pH modifier includes a carbonate salt.
- 1        6. The method of claim 4, wherein the pH modifier is an acid.
- 1        7. The method of claim 4, wherein the pH modifier is a base.
- 1        8. The method of claim 4, wherein the pH modifier includes sodium carbonate.
- 1        9. The method of claim 4, wherein the pH modifier includes acetic acid.
- 1        10. The method of claim 1, wherein the component includes a residue.
- 1        11. The method of claim 10, wherein the residue includes a resist, a soldermask,  
2 an antifoam agent, or a hard water deposit.
- 1        12. The method of claim 10, further comprising oxidizing the residue.
- 1        13. The method of claim 10, further comprising dispersing the residue.
- 1        14. The method of claim 10, further comprising dissolving the residue.
- 1        15. The method of claim 1, wherein the component includes a nozzle.
- 1        16. The method of claim 15, further comprising passing the composition through  
2 the nozzle.

- 1        17. The method of claim 15, wherein the component includes a second nozzle.
- 1        18. The method of claim 17, further comprising passing the solution through the  
2        first nozzle and the second nozzle simultaneously.
- 1        19. The method of claim 1, wherein contacting includes maintaining the  
2        composition at a temperature greater than 80 °F.
- 1        20. The method of claim 1, wherein the oxidant includes hydrogen peroxide.
- 1        21. The method of claim 1, wherein the oxidant includes sodium perborate.
- 1        22. The method of claim 1, wherein the oxidant includes an organic peroxide, a  
2        peracid, or a hydroperoxide.
- 1        23. The method of claim 1, wherein the solution includes a surfactant that is not  
2        oxidized by the oxidant.
- 1        24. The method of claim 1, further comprising removing a waste material from  
2        the equipment, the waste material including water, an oxidant, and an oxidized resist.
- 1        25. A method of cleaning printed circuit board manufacturing equipment  
2        comprising contacting a component of the equipment including a residue with an aqueous  
3        composition including an oxidant to oxidize the residue.
- 1        26. The method of claim 25, wherein the residue includes a resist, a soldermask,  
2        an antifoam agent, or a hard water deposit.
- 1        27. The method of claim 25, further comprising dispersing the residue.
- 1        28. The method of claim 25, further comprising dissolving the residue.
- 1        29. The method of claim 25, wherein the component includes a nozzle.
- 1        30. The method of claim 25, wherein the oxidant includes hydrogen peroxide.

1           31. The method of claim 25, wherein the aqueous composition includes sodium  
2       carbonate.

1           32. The method of claim 25, wherein the aqueous composition includes acetic  
2       acid.

1           33. The method of claim 25, wherein the oxidant includes an organic peroxide, a  
2       peracid, or a hydroperoxide.

1           34. The method of claim 25, further comprising removing a waste material from  
2       the equipment, the waste material including water, an oxidant, and an oxidized resist.

1           35. A method of manufacturing a printed circuit comprising contacting a board  
2       including a resist with a composition comprising an oxidant.

1           36. The method of claim 35, further comprising oxidizing the resist.

1           37. The method of claim 35, wherein the resist is overplated.

1           38. The method of claim 35, wherein contacting the board with the composition  
2       includes spraying the composition on the board.

1           39. The method of claim 35, wherein contacting the board with the composition  
2       includes immersing the board in the composition.

1           40. The method of claim 35, wherein the composition includes a pH modifier.

1           41. The method of claim 40, wherein the pH modifier is an acid.

1           42. The method of claim 40, wherein the pH modifier is a base.

1           43. The method of claim 40, wherein the pH modifier includes sodium carbonate.

1           44. The method of claim 40, wherein the pH modifier includes sodium carbonate  
2       and the oxidant include hydrogen peroxide.

1           45.     The method of claim 35, further comprising maintaining the composition at a  
2     temperature greater than 80 °F.

1           46.     The method of claim 35, wherein the oxidant includes hydrogen peroxide.

1           47.     The method of claim 35, wherein the oxidant includes sodium perborate.

1           48.     The method of claim 35, wherein the oxidant includes an organic peroxide, a  
2     peracid, or a hydroperoxide.

1           49.     The method of claim 35, further comprising removing a waste material from  
2     the equipment, the waste material including water, an oxidant, and an oxidized resist.

1           50.     A composition for treating a printed circuit board resist comprising an  
2     aqueous solution of an oxidant.

1           51.     The composition of claim 50, further comprising a pH modifier.

1           52.     The composition of claim 51, wherein the pH modifier is a carbonate salt.

1           53.     The composition of claim 52, wherein the concentration of the carbonate salt  
2     is between 20 grams per liter and 200 grams per liter.

1           54.     The composition of claim 50, wherein the oxidant includes an organic  
2     peroxide, a peracid, or a hydroperoxide.

1           55.     The composition of claim 50, further comprising a surfactant that is not  
2     oxidized by the oxidant.

1           56.     The composition of claim 50, wherein the oxidant is hydrogen peroxide.

1           57.     The composition of claim 56, wherein the concentration of hydrogen peroxide  
2     is between 2.0% and 10% by volume.

1           58.     The composition of claim 56, further comprising a pH modifier.

1           59.     The composition of claim 58, wherein the pH modifier is a carbonate salt

1       60. The composition of claim 59, wherein the concentration of hydrogen peroxide  
2 is between 2.0% and 10% by volume and the concentration of the carbonate salt is between  
3 20 grams per liter and 200 grams per liter.

1       61. The composition of claim 59, wherein the concentration of hydrogen peroxide  
2 is between 3% and 6% by volume and the concentration of sodium carbonate is between 40  
3 grams per liter and 100 grams per liter.

1       62. A composition for treating a printed circuit board resist comprising an  
2 aqueous solution of hydrogen peroxide and acetic acid.

1       63. The composition of claim 62, wherein the concentration of hydrogen peroxide  
2 is between 2.0% and 10% by volume.

1       64. The composition of claim 62, wherein the concentration of acetic acid is  
2 between 1% and 10% by volume.

1       65. The composition of claim 62, wherein the concentration of hydrogen peroxide  
2 is between 2.0% and 10% by volume and the concentration of acetic acid is between 1% and  
3 10% by volume.

1       66. The composition of claim 62, wherein the concentration of hydrogen peroxide  
2 is between 3% and 6% by volume and the concentration of acetic acid is between 3% and 6%  
3 by volume.

1       67. A composition for treating a printed circuit board resist consisting essentially  
2 of an aqueous solution of an oxidant and a pH modifier.

1       68. A composition for treating a printed circuit board resist consisting essentially  
2 of an aqueous solution of hydrogen peroxide and a carbonate salt.